

FILE 'USPAT' ENTERED AT 14:10:01 ON 28 MAR 1999

```
* * * * *
*           W E L C O M E   T O   T H E           *
*           U . S .   P A T E N T   T E X T   F I L E   *
* * * * *
```

=> s 427/585 ccls

MISSING OPERATOR

=> s 427/585/ccls

L1 330 427/585/CCLS

=> s 436/518/ccls

L2 1922 436/518/CCLS

=> s chemical vapor deposition

```
411762 CHEMICAL
170845 VAPOR
128195 DEPOSITION
L3 24600 CHEMICAL VAPOR DEPOSITION
      (CHEMICAL(W) VAPOR(W) DEPOSITION)
```

=> s electron beam evaporation .

```
130425 ELECTRON
240156 BEAM
140638 EVAPORATION
L4 2187 ELECTRON BEAM EVAPORATION
      (ELECTRON(W) BEAM(W) EVAPORATION)
```

=> s 427/457,460,468,496,581,585/ccls

```
71 427/457/CCLS
45 427/460/CCLS
63 427/468/CCLS
172 427/496/CCLS
82 427/581/CCLS
330 427/585/CCLS
L5 753 427/457,460,468,496,581,585/CCLS
      ((427/457 OR 427/460 OR 427/468 OR 427/496 OR 427/581 OR
427      /585)/CCLS)
```

=> s (12 or 15) and 14

L6 40 (L2 OR L5) AND L4

=> s 16 and component#

```
1052129 COMPONENT#
L7 29 L6 AND COMPONENT#
```

=> s 17 and array#

=> d 18 1-9

1. 5,869,272, Feb. 9, 1999, Methods for detection of gram negative bacteria; Gregory R. Bogart, et al., 435/7.32; 356/345, 402, 445; 422/82.05, 82.08; 435/7.36, 7.9, 7.92, 808, 810; 436/63, 163, 172, 174, 177, **518**, 527, 531, 532, 804, 805, 811 [IMAGE AVAILABLE]
2. 5,639,671, Jun. 17, 1997, Methods for optimizing of an optical assay device; Gregory R. Bogart, et al., **436/518**; 359/581, 585, 586, 589; 422/55, 57, 82.05, 82.11; 427/162, 164, 165, 166, 167, 250, 255, 337, 338, 404, 419.1, 419.2; 435/4, 808; 436/164, 165, 524, 532 [IMAGE AVAILABLE]
3. 5,631,171, May 20, 1997, Method and instrument for detection of change of thickness or refractive index for a thin film substrate; Torbjorn Sandstrom, et al., **436/518**; 356/357, 364, 369; 422/55, 82.05; 435/5, 808; 436/164, 524, 525, 527, 805 [IMAGE AVAILABLE]
4. 5,629,214, May 13, 1997, Methods for forming an optical device for detecting the presence or amount of an analyte; Mark Crosby, **436/518**; 427/2.11, 2.13, 162, 164, 165, 402, 407.1, 407.2, 409, 414, 419.1, 419.3; 435/4, 7.21, 7.32, 287.1, 287.2, 288.7, 808; 436/524, 528, 531, 532, 805 [IMAGE AVAILABLE]
5. 5,552,272, Sep. 3, 1996, Detection of an analyte by fluorescence using a thin film optical device; Gregory R. Bogart, 435/6; 359/580, 585; 422/55, 57, 82.05, 82.08; 435/7.2, 7.3, 7.32, 808, 810; 436/172, **518**, 524, 525, 527, 528, 531, 805, 807 [IMAGE AVAILABLE]
6. 5,550,063, Aug. 27, 1996, Methods for production of an optical assay device; Gregory R. Bogart, **436/518**; 422/55, 57, 82.05; 427/162, 164, 165, 240, 241, 414, 419.1, 419.2, 419.5, 419.7; 435/4, 808; 436/524, 525, 527, 528, 531, 532, 805 [IMAGE AVAILABLE]
7. 5,534,314, Jul. 9, 1996, Directed vapor deposition of electron beam evaporant; Haydn N. G. Wadley, et al., **427/585**; 118/723FE, 726, 727; 427/561, 566, 567, 586 [IMAGE AVAILABLE]
8. 5,494,829, Feb. 27, 1996, Devices and methods for detection of an analyte based upon light interference; Torbjorn Sandstrom, et al., **436/518**; 356/364, 369; 422/55, 82.05; 435/808; 436/164, 524, 525, 527, 805 [IMAGE AVAILABLE]
9. 5,482,830, Jan. 9, 1996, Devices and methods for detection of an analyte based upon light interference; Gregory R. Bogart, et al., 435/5; 356/369; 359/580, 585, 586, 589; 422/55, 57, 58, 82.05; 435/7.21, 7.22, 7.32, 7.36, 808; 436/164, 510, 513, **518**, 524, 525, 527, 805 [IMAGE AVAILABLE]

=> d 18 1-9 ab

US PAT NO: 5,869,272 [IMAGE AVAILABLE] L8: 1 of 9

ABSTRACT:

Method for the determination of chlamydial or gram negative bacterial antigen comprising contacting a sample potentially containing extracted antigen with an optically active surface comprising an attachment layer, and a layer of non-specific protein.

US PAT NO: 5,639,671 [IMAGE AVAILABLE] L8: 2 of 9

ABSTRACT:

Method for optimizing an optical assay device for an analyte, including the steps of: providing a substrate having a chosen thickness of an optically active layer thereon; providing an attachment layer of a chosen thickness on the optical coating; providing a receptive layer of a chosen thickness for the analyte, wherein at least one of the thicknesses of the optically active layer, attachment layer and receptive layer is varied to provide a plurality of thicknesses of that layer; contacting analyte with the receptive layer under conditions in which an increase in mass on the receptive layer results; and determining the optical thickness of the layer.

US PAT NO: 5,631,171 [IMAGE AVAILABLE]

L8: 3 of 9

ABSTRACT:

An instrument configured and arranged to detect a change in thickness or refractive index of a thin film substrate. A method for optimizing the instrument and a method for detecting a change in thickness or refractive index of a thin film substrate.

US PAT NO: 5,629,214 [IMAGE AVAILABLE]

L8: 4 of 9

ABSTRACT:

A method for forming an optical device for detecting the presence or amount of an analyte of interest comprising a substrate which supports an optically active layer, an attachment layer provided on the optically active layer, and a receptive layer specific the analyte provided on the attachment layer. The method comprises forming the optically active layer with a chosen refractive index on the substrate by curing the optically active layer on the substrate at a controlled temperature or for a controlled length of time and subsequently providing the attachment and receptive layers on the optically active layer.

US PAT NO: 5,552,272 [IMAGE AVAILABLE]

L8: 5 of 9

ABSTRACT:

Device for detecting the presence or amount of an analyte of interest, comprising a reflective solid, optical support and a label capable of generating fluorescent signal upon excitation with a suitable light source wherein said support comprises an attachment layer comprising a chemical selected from the group consisting of dendrimers, star polymers, molecular self-assembling polymers, polymeric siloxanes, and film forming latexes wherein the support provides an enhanced level of exciting photons to the immobilized fluorescent label compound, and wherein the support also increases the capture of fluorescent signal.

US PAT NO: 5,550,063 [IMAGE AVAILABLE]

L8: 6 of 9

ABSTRACT:

Method for producing an optical assay device having a substrate and one or more optical layers, an attachment layer and a receptive layer, including the step of spin coating an anti-reflective layer or an attachment layer.

US PAT NO: 5,534,314 [IMAGE AVAILABLE]

L8: 7 of 9

ABSTRACT:

A process for vapor depositing an evaporant onto a substrate is provided which involves:

presenting the substrate to a deposition chamber, wherein the deposition chamber has an operating pressure of from 0.001 Torr to atmospheric pressure and has coupled thereto a carrier gas stream generator and an electron beam gun capable of providing an electron beam at the operating pressure and contains an evaporant source;

impinging the evaporant source with the electron beam to generate the evaporant;
entraining the evaporant in the carrier gas stream; and
coating the substrate with the carrier gas stream which contains the entrained evaporant, and an apparatus for performing the process.

US PAT NO: 5,494,829 [IMAGE AVAILABLE]

L8: 8 of 9

ABSTRACT:

Instrument configured and arranged to detect the presence or amount of an analyte of interest on the substrate of an optical device. The instrument has a source of linearly polarized, monochromatic light positioned at an angle other than Brewster's angle relative to the substrate; and an analyzer positioned at the same angle relative to the substrate at a location suitable for detecting reflected polarized light from the substrate; wherein the analyzer is configured and arranged to approximately maximize the change in intensity of the light reflected from the substrate that is transmitted through the analyzer when a change in mass occurs at the substrate relative to an unreacted surface.

US PAT NO: 5,482,830 [IMAGE AVAILABLE]

L8: 9 of 9

ABSTRACT:

Device for detecting the presence or amount of an analyte of interest, having a substrate possessing an optically active surface which exhibits a first color in response to light impinging thereon, and exhibits a second color comprising a combination of wavelengths of light different from the first color or comprising an intensity of at least one wavelength of light different from the first color, in response to the light when the analyte is present on the surface of any amount selected from 0.1 nM, 0.1 ng/ml, 50 fg, and 2.times.10.sup.3 organisms comprising the analyte.